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Sequence Listing was accepted.

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Reviewer: markspencer

Timestamp: [year=2010; month=4; day=16; hr=6; min=41; sec=53; ms=1; ]

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Application No: 10553710

Version No: 1.0

Input Set:

Output Set:

Started: 2010-04-15 16:10:43.945

Finished: 2010-04-15 16:10:45.736

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 791 ms

Total Warnings: 13

Total Errors: 0

No. of SeqIDs Defined: 37

Actual SeqID Count: 37

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
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W 213	Artificial or Unknown found in <213> in SEQ ID (26)
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SEQUENCE LISTING

<110> Sah, Dinah Wen-Yee  
Pepinsky, R. Blake  
Rossomando, Anthony

<120> POLYMER-CONJUGATED, GLYCOSYLATED  
NEUBLASTIN

<130> 13751-035W01

<140> 10553710

<141> 2010-04-15

<150> PCT/US04/011745

<151> 2004-04-16

<150> US 60/463,899

<151> 2003-04-18

<160> 37

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> consensus sequence

<220>

<221> VARIANT

<222> 3

<223> Xaa = Gly or Thr

<220>

<221> VARIANT

<222> 4

<223> Xaa = Pro or Arg

<220>

<221> VARIANT

<222> 5

<223> Xaa = Gly or Ser

<220>

<221> VARIANT

<222> 10, 11

<223> Xaa = Ala or Thr

<220>

<221> VARIANT

<222> 12  
<223> Xaa = Gly or Asp

<220>  
<221> VARIANT  
<222> 26, 33  
<223> Xaa = Arg or Ser

<220>  
<221> VARIANT  
<222> 38, 76  
<223> Xaa = Val or Ile

<220>  
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<222> 53  
<223> Xaa = Pro or Gln

<220>  
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<222> 69  
<223> Xaa = Pro or Ser

<220>  
<221> VARIANT  
<222> 103  
<223> Xaa = Arg or His

<400> 1  
Ala Gly Xaa Xaa Xaa Ser Arg Ala Arg Xaa Xaa Xaa Ala Arg Gly Cys  
1 5 10 15  
Arg Leu Arg Ser Gln Leu Val Pro Val Xaa Ala Leu Gly Leu Gly His  
20 25 30  
Xaa Ser Asp Glu Leu Xaa Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg  
35 40 45  
Arg Ala Arg Ser Xaa His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala  
50 55 60  
Gly Ala Leu Arg Xaa Pro Pro Gly Ser Arg Pro Xaa Ser Gln Pro Cys  
65 70 75 80  
Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser  
85 90 95  
Thr Trp Arg Thr Val Asp Xaa Leu Ser Ala Thr Ala Cys Gly Cys Leu  
100 105 110  
Gly

<210> 2  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 2  
Ala Gly Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys  
1 5 10 15  
Arg Leu Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His  
20 25 30  
Arg Ser Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg

35	40	45
Arg Ala Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala		
50	55	60
Gly Ala Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys		
65	70	75
Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser		
85	90	95
Thr Trp Arg Thr Val Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu		
100	105	110
Gly		

<210> 3  
 <211> 113  
 <212> PRT  
 <213> Mus musculus

<400> 3
Ala Gly Thr Arg Ser Ser Arg Ala Arg Thr Thr Asp Ala Arg Gly Cys
1 5 10 15
Arg Leu Arg Ser Gln Leu Val Pro Val Ser Ala Leu Gly Leu Gly His
20 25 30
Ser Ser Asp Glu Leu Ile Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg
35 40 45
Arg Ala Arg Ser Gln His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala
50 55 60
Gly Ala Leu Arg Ser Pro Pro Gly Ser Arg Pro Ile Ser Gln Pro Cys
65 70 75 80
Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser
85 90 95
Thr Trp Arg Thr Val Asp His Leu Ser Ala Thr Ala Cys Gly Cys Leu
100 105 110
Gly

<210> 4  
 <211> 113  
 <212> PRT  
 <213> Rattus norvegicus

<400> 4
Ala Gly Thr Arg Ser Ser Arg Ala Arg Ala Thr Asp Ala Arg Gly Cys
1 5 10 15
Arg Leu Arg Ser Gln Leu Val Pro Val Ser Ala Leu Gly Leu Gly His
20 25 30
Ser Ser Asp Glu Leu Ile Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg
35 40 45
Arg Ala Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala
50 55 60
Gly Ala Leu Arg Ser Pro Pro Gly Ser Arg Pro Ile Ser Gln Pro Cys
65 70 75 80
Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser
85 90 95
Thr Trp Arg Thr Val Asp His Leu Ser Ala Thr Ala Cys Gly Cys Leu
100 105 110
Gly

<210> 5  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<400> 5  
 Met Glu Leu Gly Leu Gly Gly Leu Ser Thr Leu Ser His Cys Pro Trp  
 1 5 10 15  
 Pro Arg Arg Gln Pro Ala Leu Trp Pro Thr Leu Ala Ala Leu Ala Leu  
 20 25 30  
 Leu Ser Ser Val Ala Glu Ala Ser Leu Gly Ser Ala Pro Arg Ser Pro  
 35 40 45  
 Ala Pro Arg Glu Gly Pro Pro Pro Val Leu Ala Ser Pro Ala Gly His  
 50 55 60  
 Leu Pro Gly Gly Arg Thr Ala Arg Trp Cys Ser Gly Arg Ala Arg Arg  
 65 70 75 80  
 Pro Pro Pro Gln Pro Ser Arg Pro Ala Pro Pro Pro Pro Ala Pro Pro  
 85 90 95  
 Ser Ala Leu Pro Arg Gly Gly Arg Ala Ala Arg Ala Gly Gly Pro Gly  
 100 105 110  
 Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln  
 115 120 125  
 Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu  
 130 135 140  
 Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro  
 145 150 155 160  
 His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro  
 165 170 175  
 Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg  
 180 185 190  
 Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val  
 195 200 205  
 Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly  
 210 215 220

<210> 6  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
 Pro Pro Pro Gln Pro Ser Arg Pro Ala Pro Pro Pro Pro Ala Pro Pro  
 1 5 10 15  
 Ser Ala Leu Pro Arg Gly Gly Arg Ala Ala Arg Ala Gly Gly Pro Gly  
 20 25 30  
 Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln  
 35 40 45  
 Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu  
 50 55 60  
 Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro  
 65 70 75 80  
 His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro  
 85 90 95  
 Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg  
 100 105 110  
 Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val

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115          120          125
Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
130          135          140

<210> 7
<211> 116
<212> PRT
<213> Homo sapiens

<400> 7
Ala Ala Arg Ala Gly Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala
1          5          10          15
Arg Gly Cys Arg Leu Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly
20          25          30
Leu Gly His Arg Ser Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly
35          40          45
Ser Cys Arg Arg Ala Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu
50          55          60
Leu Gly Ala Gly Ala Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser
65          70          75          80
Gln Pro Cys Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp
85          90          95
Val Asn Ser Thr Trp Arg Thr Val Asp Arg Leu Ser Ala Thr Ala Cys
100          105          110
Gly Cys Leu Gly
115

<210> 8
<211> 112
<212> PRT
<213> Homo sapiens

<400> 8
Gly Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg
1          5          10          15
Leu Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg
20          25          30
Ser Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg
35          40          45
Ala Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu Gly Ala Gly
50          55          60
Ala Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys
65          70          75          80
Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr
85          90          95
Trp Arg Thr Val Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
100          105          110

<210> 9
<211> 111
<212> PRT
<213> Homo sapiens

<400> 9
Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu
1          5          10          15
Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser

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20	25	30
Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala		
35	40	45
Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala		
50	55	60
Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg		
65	70	75
Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp		
85	90	95
Arg Thr Val Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly		
100	105	110

<210> 10  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 10
Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg
1 5 10 15
Ser Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp
20 25 30
Glu Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg
35 40 45
Ser Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu
50 55 60
Arg Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro
65 70 75 80
Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg
85 90 95
Thr Val Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
100 105 110

<210> 11  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 11
Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser
1 5 10 15
Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu
20 25 30
Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser
35 40 45
Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg
50 55 60
Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr
65 70 75 80
Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr
85 90 95
Val Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
100 105

<210> 12  
 <211> 108  
 <212> PRT



<213> Homo sapiens

<400> 12

Ser	Arg	Ala	Arg	Ala	Ala	Gly	Ala	Arg	Gly	Cys	Arg	Leu	Arg	Ser	Gln
1				5					10					15	
Leu	Val	Pro	Val	Arg	Ala	Leu	Gly	Leu	Gly	His	Arg	Ser	Asp	Glu	Leu
			20					25					30		
Val	Arg	Phe	Arg	Phe	Cys	Ser	Gly	Ser	Cys	Arg	Arg	Ala	Arg	Ser	Pro
		35					40					45			
His	Asp	Leu	Ser	Leu	Ala	Ser	Leu	Leu	Gly	Ala	Gly	Ala	Leu	Arg	Pro
	50					55				60					
Pro	Pro	Gly	Ser	Arg	Pro	Val	Ser	Gln	Pro	Cys	Cys	Arg	Pro	Thr	Arg
65					70					75				80	
Tyr	Glu	Ala	Val	Ser	Phe	Met	Asp	Val	Asn	Ser	Thr	Trp	Arg	Thr	Val
				85					90					95	
Asp	Arg	Leu	Ser	Ala	Thr	Ala	Cys	Gly	Cys	Leu	Gly				
			100					105							

<210> 13

<211> 107

<212> PRT

<213> Homo sapiens

<400> 13

Arg	Ala	Arg	Ala	Ala	Gly	Ala	Arg	Gly	Cys	Arg	Leu	Arg	Ser	Gln	Leu
1				5					10					15	
Val	Pro	Val	Arg	Ala	Leu	Gly	Leu	Gly	His	Arg	Ser	Asp	Glu	Leu	Val
			20					25				30			
Arg	Phe	Arg	Phe	Cys	Ser	Gly	Ser	Cys	Arg	Arg	Ala	Arg	Ser	Pro	His
		35					40				45				
Asp	Leu	Ser	Leu	Ala	Ser	Leu	Leu	Gly	Ala	Gly	Ala	Leu	Arg	Pro	Pro
	50					55				60					
Pro	Gly	Ser	Arg	Pro	Val	Ser	Gln	Pro	Cys	Cys	Arg	Pro	Thr	Arg	Tyr
65					70					75				80	
Glu	Ala	Val	Ser	Phe	Met	Asp	Val	Asn	Ser	Thr	Trp	Arg	Thr	Val	Asp
				85					90					95	
Arg	Leu	Ser	Ala	Thr	Ala	Cys	Gly	Cys	Leu	Gly					
			100					105							

<210> 14

<211> 106

<212> PRT

<213> Homo sapiens

<400> 14

Ala	Arg	Ala	Ala	Gly	Ala	Arg	Gly	Cys	Arg	Leu	Arg	Ser	Gln	Leu	Val
1				5					10					15	
Pro	Val	Arg	Ala	Leu	Gly	Leu	Gly	His	Arg	Ser	Asp	Glu	Leu	Val	Arg
			20					25				30			
Phe	Arg	Phe	Cys	Ser	Gly	Ser	Cys	Arg	Arg	Ala	Arg	Ser	Pro	His	Asp
		35					40					45			
Leu	Ser	Leu	Ala	Ser	Leu	Leu	Gly	Ala	Gly	Ala	Leu	Arg	Pro	Pro	Pro
	50					55				60					
Gly	Ser	Arg	Pro	Val	Ser	Gln	Pro	Cys	Cys	Arg	Pro	Thr	Arg	Tyr	Glu
65					70					75				80	
Ala	Val	Ser	Phe	Met	Asp	Val	Asn	Ser	Thr	Trp	Arg	Thr	Val	Asp	Arg
				85					90					95	

Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly  
100 105

<210> 15

<211> 105

<212> PRT

<213> Homo sapiens

<400> 15

Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln Leu Val Pro  
1 5 10 15  
Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu Val Arg Phe  
20 25 30  
Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro His Asp Leu  
35 40 45  
Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro Pro Pro Gly  
50 55 60  
Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg Tyr Glu Ala  
65 70 75 80  
Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val Asp Arg Leu  
85 90 95  
Ser Ala Thr Ala Cys Gly Cys Leu Gly  
100 105

<210> 16

<211> 104

<212> PRT

<213> Homo sapiens

<400> 16

Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln Leu Val Pro Val  
1 5 10 15  
Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu Val Arg Phe Arg  
20 25 30  
Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro His Asp Leu Ser  
35 40 45  
Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro Pro Pro Gly Ser  
50 55 60  
Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg Tyr Glu Ala Val  
65 70 75 80  
Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val Asp Arg Leu Ser  
85 90 95  
Ala Thr Ala Cys Gly Cys Leu Gly  
100

<210> 17

<211> 103

<212> PRT

<213> Homo sapiens

<400> 17

Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln Leu Val Pro Val Arg  
1 5 10 15  
Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu Val Arg Phe Arg Phe  
20 25 30  
Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro His Asp Leu Ser Leu  
35 40 45

Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro Pro Pro Gly Ser Arg  
 50 55 60  
 Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser  
 65 70 75 80  
 Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val Asp Arg Leu Ser Ala  
 85 90 95  
 Thr Ala Cys Gly Cys Leu Gly  
 100

<210> 18  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 18  
 Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln Leu Val Pro Val Arg Ala  
 1 5 10 15  
 Leu Gly Leu Gly His Arg Ser Asp Glu Leu Val Arg Phe Arg Phe Cys  
 20 25 30  
 Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro His Asp Leu